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L 16646-65
ACCESSION NR: AP5000164

ENCLOSURE: 01

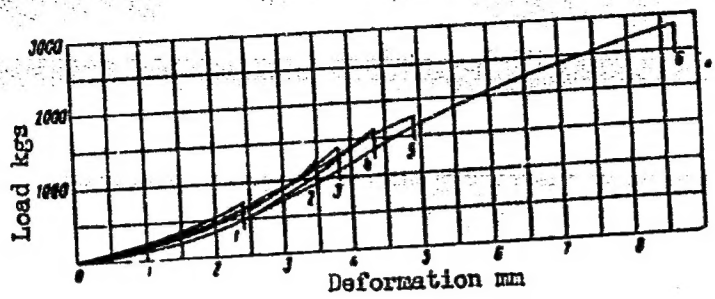

Fig. 1. Deflection curves of standard welded disk specimens under tests on a Gagarin press. Numbers of curves (1-6) correspond to specimens undergoing various heat treatment conditions.

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L 38554-66 EWT(m)/EWP(k)/T/EWP(e)/EWP(w)/EWP(v)/EWP(t)/ETI IJP(c) JD/HM/JG/

ACC NR: AT6012401 GD SOURCE CODE: UR/0000/65/000/000/0263/0268

AUTHORS: Borisova, Ye. A.; Gruzdeva, L. A.; Folomeyeva, M. A.; Shashenkova, I. I.

ORG: none

TITLE: Effects of small amounts of boron, beryllium and lanthanum on the properties of welded seams of titanium alloys

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 263-268

TOPIC TAGS: SEAM WELDING, DURABILITY, PLASTICITY, titanium alloy, metal welding, metal property, boron containing alloy, beryllium containing alloy, lanthanum containing alloy / VT-1 titanium alloy, OT4 titanium alloy, VT5 titanium alloy, VTZ-1 titanium alloy

ABSTRACT: The effects of small amounts of boron, beryllium and lanthanum on the mechanical properties and structure of titanium alloy welded seams were experimentally investigated on alloys VT1-1, OT4, and VT5. Butt-welded (argon-arc) 2-mm thick specimens were tested over a temperature range of 20--500C, and curves of tensile strength and bending angle (to test for plasticity) at failure are presented for different additives over this temperature range. Photographs of the welding seam microstructures for different amounts of the additives are also shown. It was found that: addition of up to 0.04% Be, 0.12% B, and 0.10% La had no effect on the mechanical

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L 38554-66

ACC NR: AT6012401

properties of the alloys over the temperature range 20--500C; addition of Be increases the yield strength of OT4 and VT5 welds without any effect on the plastic properties or on the microstructure; addition of up to 0.13% B modifies the structure of OT4 and VT5 welds and slightly increases strength but at decreased plasticity. The results justify further experiments on adding Be into welding rod alloys. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 11, 13/ SUBM DATE: 02Dec65/ ORIG REF: 003

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

L 9651-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) LIP(c) MJW/JD

ACC NR: AP5027604 SOURCE CODE: UR/0135/65/000/011/0027/0029

44,55

AUTHOR: Borisova, Ye. A. (Candidate of technical sciences); Shashenkova, I. I. (Engineer); Gruzdeva, L. A. (Engineer) 43

44,55

ORG: none

TITLE: Resistance of welded joints of VT14 titanium alloy to cracking under prolonged load

18 44,55,27

SOURCE: Svarochnoye proizvodstvo, no. 11, 1965, 27-29

TOPIC TAGS: crack formation, titanium alloy, static load test, annealing / VT14 titanium alloy

18

ABSTRACT: The use of titanium alloys to manufacture products performing under high pressure raises the question of their long-time reliability. So far, the pertinent conditions have been simulated in the laboratory by subjecting specimens to an uniaxially stressed state, whereas under real conditions the alloys exist in a complex-stressed state. To remedy this gap, the proneness of titanium alloys to eventual fracture was investigated by means of a specially developed method simulating the plane stressed state. The method consists in determining the time (in days) until the appearance of cracks in welded washers subjected to a constant load in a special device (Fig. 1). The welded washers investigated were made of VT14 titanium alloy

Card 1/3 UDC: 621.791.011:669.295.5

2

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L 9651-66

ACC NR: AP5027604

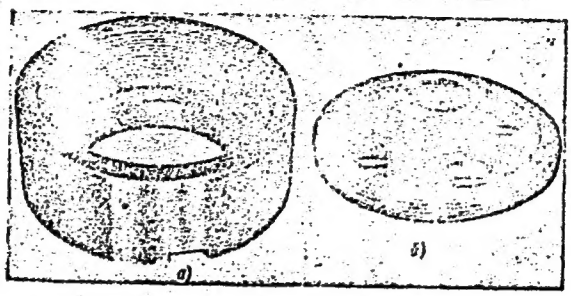

Fig. 1. Device for long-time loading of washers:

a - housing; b - lid. The loading of the specimen (washer) is produced by the projecting edge of the lid as it is screwed into the housing

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L 9651-66
ACC NR: AP5027604

(3.88% Al, 3.02% Mo, 1.02% V, 0,015% H_2, 0.08% O_2, 0.02% N_2). The effect of annealing on cracking under prolonged load was also investigated by first heating some of the washers in an air-atmosphere furnace at 800°C for 15 min and cooling them in air. The loaded specimens periodically examined under a microscope with a magnification of 16-56 times in order to detect any cracks. Findings: no cracks were observed during the first 180 days of loading in the annealed and non-annealed specimens subjected to a load equal to 25% of the breaking load (P = 450 and 725 kg, respectively, for annealed and non-annealed specimens). When the load was raised to 50% of the breaking load, however, a large number of cracks appeared along grain boundaries in the unannealed specimens. Thus, annealing has a beneficial effect on the welded joints of VT14 titanium alloy exposed to prolonged loading. It is also established that the gas-saturated layer forming on the surface of specimens of VT14 alloy during their heating at aging temperatures leads to the premature cracking of the welded joint under prolonged loading. Hence, the author recommends eliminating this gas-contaminated layer by sandblasting with subsequent pickling or by other methods.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 000

Card 3/3

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L 40164-66 EWT(m)/EWP(t)/ETI/EWT(k) IJP(c) JD/HM

ACC NR: AP6025085 SOURCE CODE: UR/0122/66/000/007/0056/0058

AUTHOR: Borisova, Ye. A. (Candidate of technical sciences); Shashenkova, I. I. (Engineer) 44

ORG: none

TITLE: Effect of hydrogen content on delayed failure of VT6S-alloy welds

SOURCE: Vestnik mashinostroyeniya, no. 7, 1966, 56-58

TOPIC TAGS: material failure, hydrogen, tensile strength, titanium alloy, aluminum containing alloy, vanadium containing alloy, hydrogen containing alloy, alloy weld, weld failure, delayed failure/VT6S titanium alloy

ABSTRACT: The effect of hydrogen on the susceptibility of VT6S titanium alloy (4.79% Al, 3.04% V, 0.13% Fe, 0.1% Si and 0.04% C) and alloy welds to delayed failure has been investigated. Disk-shaped 2-mm-thick solid and welded specimens containing 0.004%, 0.02%, or 0.03% H_2 were stress relieved at 750C and biaxially stressed in a special device under 25—50% of their breaking load (determined in short-term tests). Welded specimens containing 0.004% hydrogen (vacuum annealed) withstood 130 days under 50% load without cracking, except for one in which the first crack appeared after 54 days. Specimens with 0.03% H_2 failed in 3-4 days under a 25—50% load. Specimens of the parent metal exhibited similar behavior. No hydrides were detected in any of the investigated specimens regardless of their hydrogen content; their structure consisted of a mixture of $\alpha + \beta$ phase. Hydrogen increases the tensile strength of

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L 40163-66

ACC NR: AP6025085

the alloy to 102.4 kg/mm^2 at 0.03% hydrogen, from 87.9 kg/mm^2 at 0.004% H_2. At the same time it substantially lowers the ductility of the weld, especially under biaxial stresses. Orig. art. has: 1 figure and 2 tables. [ND]

SUB CODE: 11 / SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 5049

Card 2/2 MLP

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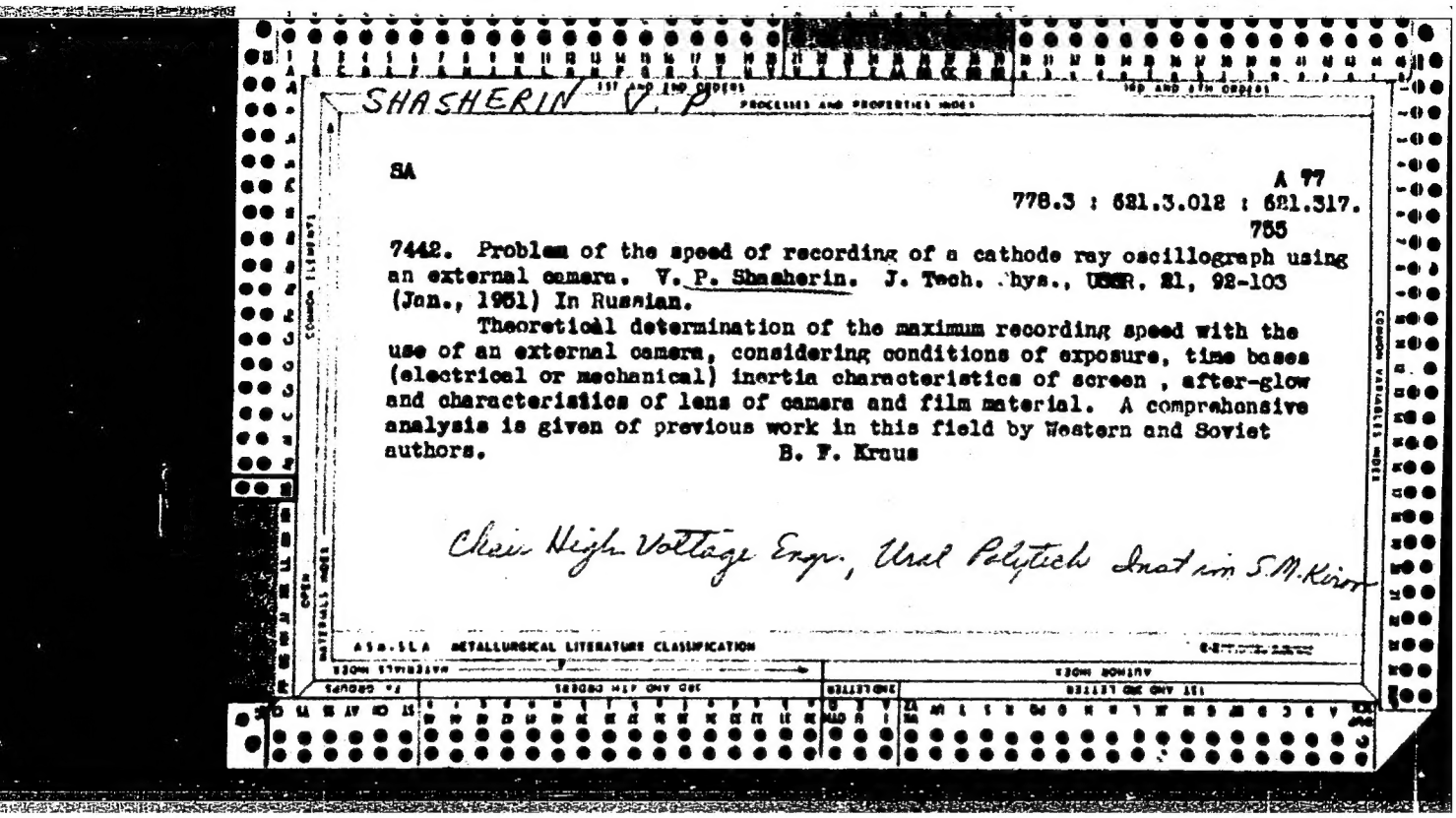

SHASHERIN V. P.

SA

A 77

778.3 : 621.3.012 : 621.317.
755

7442. Problem of the speed of recording of a cathode ray oscillograph using an external camera. V. P. Shasherin. J. Tech. Phys., USSR, 21, 92-103 (Jan., 1951) In Russian.

Theoretical determination of the maximum recording speed with the use of an external camera, considering conditions of exposure, time bases (electrical or mechanical) inertia characteristics of screen, after-glow and characteristics of lens of camera and film material. A comprehensive analysis is given of previous work in this field by Western and Soviet authors. B. F. Kraus

Chair High Voltage Engr., Ural Polytech Inst im S.M. Kirov

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHKIN, V. P.

Dissertation: "Some Problems of Cathode Oscillograph Measurements in Tests of High-Voltage Equipment." Cand Tech Sci, Ural Polytechnic Inst, Sverdlovsk, 1953. Referativnyy Zhurnal--Fizika, Moscow, May 54.

SO: SUM 284, 26 Nov 1954

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHERIN, V. P.

V. P. Shasherin, "High frequency correction of the characteristics of a wideband amplifier stage of a reactance tube or semiconducting triode." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep 58.

It is proposed to compensate the influence of parasitic capacitance of a stage by connecting it in parallel to a "negative capacitance". Such a capacitance can be generated by connecting the plate load of an amplifier tube in parallel with a reactance tube on whose grid is applied a voltage through the mutual inductance coupling the grid circuit of this tube to the plate circuit of the amplifier tube. A semiconducting triode can be used in place of the reactance tube.

The question is considered of selecting the circuit parameters in order to achieve optimum characteristics of the amplifier stage.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHERIN, V. P.

"Some Problems of Cathode-Oscillographic Measurements when Testing High-Frequency Apparatus." Official opponents: N. S. Siunov, Professor, Doctor of Technical Sciences and V. G. Stepanov, Candidate of Technical Sciences,

Dissertation for the Degree of Candidate of Technical Sciences, defended at Ural Polytechnic Institute imeni Kirov, ~~1949-1954~~, 18 JAN 1954 (Elektrichestvo, 1958, Nr 5, pp. 91-92 (USSR)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

108-13-3-5/13

AUTHOR: Shasherin, V. P.

TITLE: On the Theory of Critical Overshoot in Multicascade Pulse Amplifiers (O teorii kriticheskogo vybrosa mnogokaskadnykh impul'snykh usiliteley)

PERIODICAL: Radiotekhnika, 1958, Vo. 13, Nr 3, pp. 35 - 47 (USSR)

ABSTRACT: The author precises the theory of the "critical overshoot" invented by O. B. Lur'ye in 1936. It is shown that the formulation of this theory used at present for multicascade pulse amplifiers and high-frequency correction is not exact. The new formulation reads: in a multicascade amplifier corrected according to high-frequency and exhibiting fluctuating tran sition characteristics the correction parameters can be selected in such a way that the overshoot of the transition characteristics of the entire amplifier increases with the increase of the number of cascades n, and at $n \to \infty$ asymptotically approaches a certain limit called the critical- or limit-overshoot δ_{cr}. In the case of correction parameters showing a greater overshoot in a cascade than is the case with the parameters corresponding to δ_{cr} the

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On the Theory of Critical Overshoot in Multicascade Pulse Amplifiers

overshoot of a multicascade amplifier increases to infinity with the increase of the cascade number. When the correction parameters are of such a kind that the overshoot in a cascade is smaller than with the parameters corresponding to δ_{cr} according to the increase of the cascade. In the case of a smaller cascade number the overshoot can here be greater than the limit value but smaller than δ_{cr}. - It is shown that in the case of a simple correction scheme (an inductivity in series with the anode resistance) the critical overshoot is equal to 2,2 % with a value of the correction parameter of k 0,36. There are 4 figures, 5 tables, and 7 references, 7 of which are Soviet.

SUBMITTED: December 3, 1956

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHERIN, V.P.

Letter to the editor. Synthesis of amplifier circuits.
Radiotekhnika 13 no.6:77-80 Je '58. (MIRA 11:6)

1.Deystvitel'nyy chlen Vsesoyuznogo nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi im. A.S. popova.
(Amplifiers, Electron-tube)

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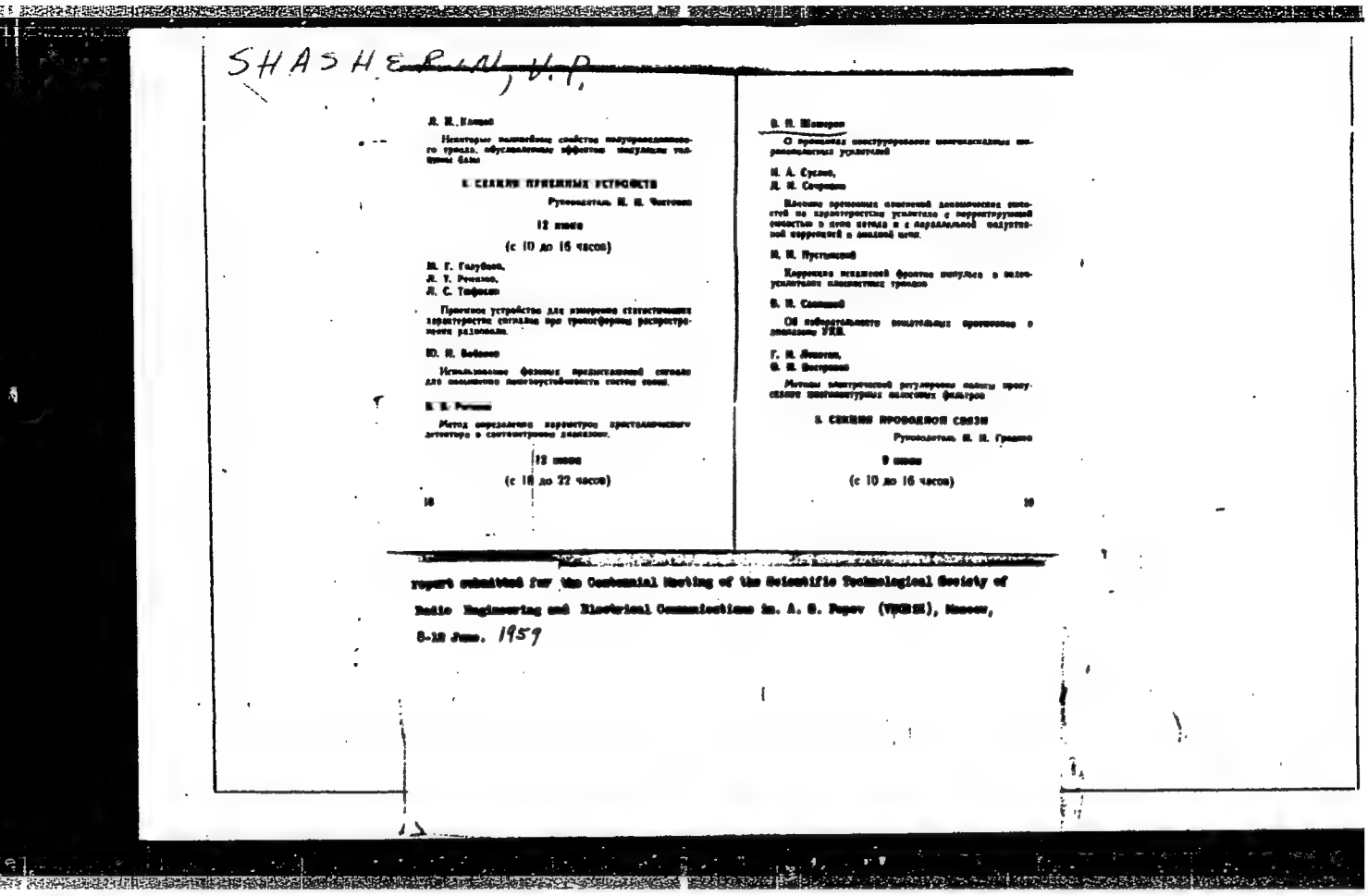

SHASHERIN, V.P.

Л. И. Кацев

Некоторые полезные свойства полупроводникового тренда, обусловленные эффектом модуляции толщины базы

5. СЕКЦИЯ ПРИЕМНЫХ УСТРОЙСТВ

Руководитель И. И. Чистяков

12 июня

(с 10 до 16 часов)

М. Г. Голубков,
Л. Т. Ремизов,
Л. С. Тифонов

Приемное устройство для измерения статистических характеристик сигнала при трансформации распространения радиоволн.

Ю. Н. Бабанов

Использование фазовых предыскажений сигнала для повышения помехоустойчивости систем связи.

В. В. Рогинов

Метод определения параметров кристаллического детектора в сантиметровом диапазоне.

12 июня

(с 18 до 22 часов)

18

В. П. Шамерин

О принципах конструирования многокаскадных широкополосных усилителей

И. А. Суслов,
Д. И. Сочрякин

Влияние временных изменений динамических емкостей на характеристики усилителя с корректирующей емкостью в цепи катода и с параллельной индуктивной коррекцией в анодной цепи.

И. И. Пустынский

Коррекция искажений фронтов импульса в видеоусилителях плоскостных триодов

В. И. Савинский

Об избирательности вещательных приемников в диапазоне УКВ.

Г. И. Ленотин,
Ф. И. Востряков

Методы электрической регулировки полосы пропускания многоконтурных полосовых фильтров

6. СЕКЦИЯ ПРОВОДНОЙ СВЯЗИ

Руководитель И. И. Гроднев

9 июня

(с 10 до 16 часов)

19

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June. 1959

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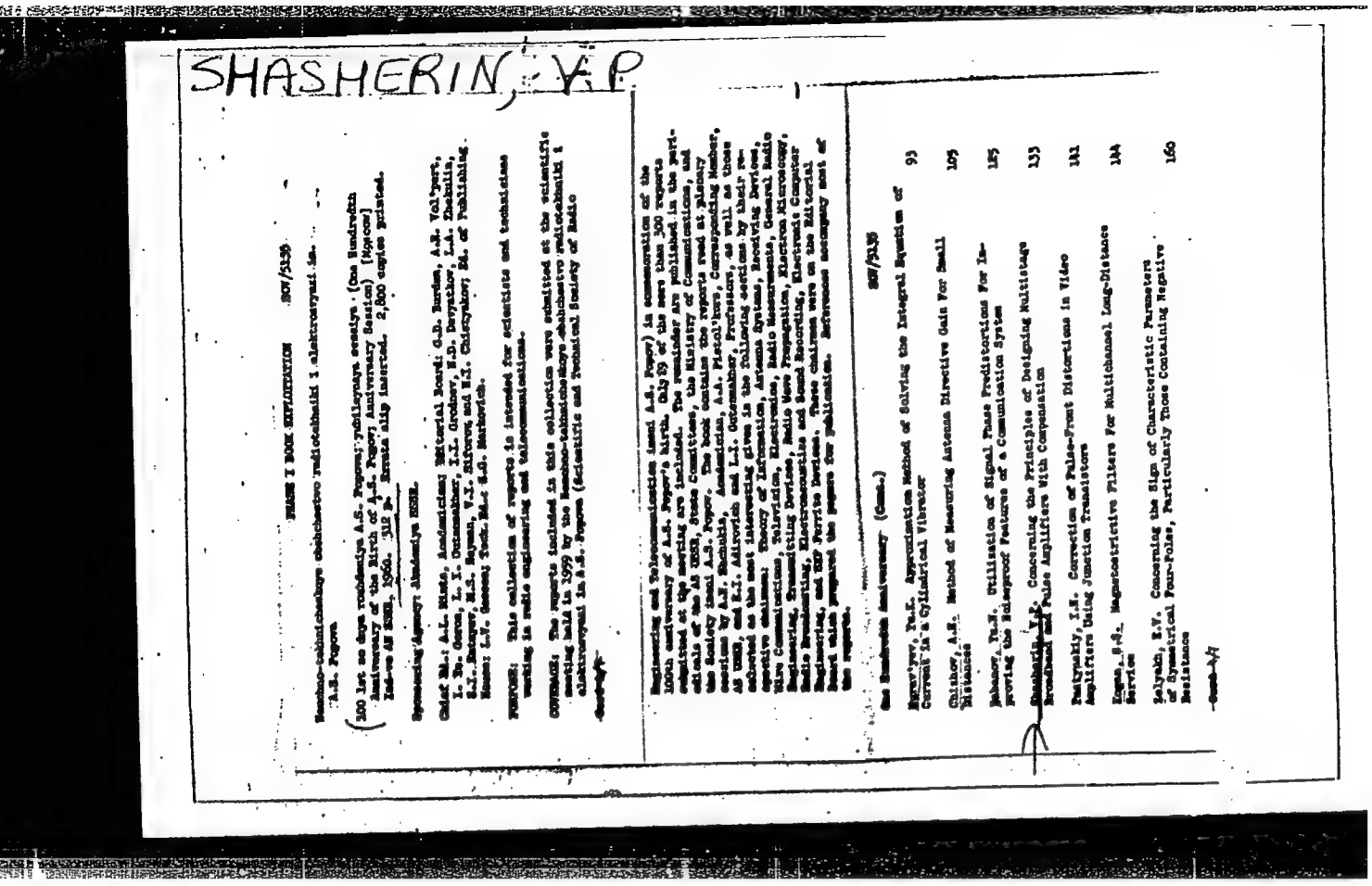

SHASHERIN, V.P.

TITLE & BOOK INFORMATION SOV/5139

Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova

300 let na dnya rozhdeniya A.S. Popova; yubileynaya sessiya. (Ten Hundredth Anniversary of the Birth of A.S. Popov; Anniversary Session) [Agenda] Izdano ob NTOIRE, 1960. 312 p. Errata slip inserted. 2,800 copies printed.

Sponsoring Agency: Ministerstvo RSFSR.

Chief Ed.: A.L. Mints, Academician; Editorial Board: G.D. Burdun, A.N. Volynet, I. Ya. Gurvich, L. I. Ostrovskiy, I.I. Grudzev, K.D. Sergeyev, L.L. Zaslavskiy, S.P. Zhdanov, N.S. Nayman, V.I. Siforov and N.I. Chistyakov; Ed. of Publishing House: L.V. Gusarova; Tech. Ed.: A.D. Matveyeva.

PURPOSE: This collection of reports is intended for scientists and technicians working in radio engineering and telecommunications.

COVERAGE: The reports included in this collection were submitted at the scientific meeting held in 1959 by the Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im A.S. Popova (Scientific and Technical Society of Radio Engineering and Telecommunication Imeni A.S. Popov) in commemoration of the 100th anniversary of A.S. Popov's birth. Only 69 of the more than 300 reports submitted at the meeting are included. The remainder are published in the periodicals of the AN SSSR, State Committees, the Ministry of Communications, and the Society Imeni A.S. Popov. The book contains the reports read at plenary sessions by A.I. Berg, Academician, A.A. Pistolkors, Corresponding Member, AS USSR, and E.L. Ginzton, Ye.L. Gutsenmakher, Professor, as well as those devoted to the most interesting given in the following sections by their respective chairmen: Theory of Information, Antenna Systems, Receiving Devices, Wire Communications, Television, Electronics, Radio Measurements, General Radio Engineering, Transmitting Devices, Radio Wave Propagation, Electron Microscopy, Relativistic Electronics, Electroacoustics and Sound Recording, Electronic Computer Engineering, and New Ferrite Devices. These chairmen were on the Editorial Board which prepared the papers for publication. Reference accompany most of the reports.

SOV/5139

Ten Hundredth Anniversary (Cont.)

Berezyuk, Ye.K. Approximation Method of Solving the Integral Equation of Current in a Cylindrical Vibrator 93

Chizhov, A.K. Method of Measuring Antenna Directive Gain For Small Distances 105

Johnson, Ye.N. Utilization of Signal Phase Predistortions For Improving the Noiseproof Features of a Communication System 125

Sosnovich, Ye.P. Concerning the Principles of Designing Multistage Broadband and Pulse Amplifiers With Compensation 133

Rutkovskiy, I.M. Correction of Pulse-Front Distortions in Video Amplifiers Using Junction Transistors 141

Ingel, S.Ya. Magnetostrictive Filters For Multichannel Long-Distance Service 144

Zolotnik, E.V. Concerning the Sign of Characteristic Parameters of Symmetrical Four-Poles, Particularly Those Containing Negative Resistance 160

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

L 38600-65 EWT(1) Peb
ACCESSION NR: AP5005983 S/0108/65/020/002/0045/0051

AUTHOR: Shasherin, V. P. (Active member)

TITLE: Calculation of complicated pulsed systems on the basis of a specified transient response by the method of multiple roots of the characteristic equation

SOURCE: Radiotekhnika, v. 20, no. 2, 1965, 45-51

TOPIC TAGS: pulsed system, pulsed amplifier, multistage amplifier

ABSTRACT: A theoretical work by S. N. Krize (Radiotekhnika, v. 13, no. 9, 1958) is criticized and its conclusions are refuted. The form of the roots of the characteristic equation describing a multiloop system, such as a multistage amplifier, which satisfies an optimal transient response is considered. It is proven that, in a multiloop ladder network, whose sections are so coupled that each serves as a load for the preceding section, the equality between the rise times (or between the passbands) does not correspond to the root multiplicity of

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ACCESSION NR: AP5005983

the entire-network characteristic equation. Selecting the parameters of a multi-loop network on the basis of multiple roots and a specified permissible peak does not result in a transient response with a minimum rise time. It is finally shown that the optimal transient response can be ensured only by nonmultiple roots of the characteristic equation, i.e., by the stages having different parameters. Orig. art. has: 2 figures, 15 formulas, and 2 tables.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi (Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 00 ENCL: 00 SUB CODE: EC

NO REF SOV: 002 OTHER: 001

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

GARSHENIN, Vasiliy Grigor'yevich; SHASHERINA, N., red.; SHUVALOV, I., tekhn.red.

[Models of agricultural machinery] Modeli sel'skokhoziaistvennykh mashin. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1957. 71 p. (MIRA 13:8)

(Agricultural machinery--Models)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

BORISOV, Viktor Gavrilovich; SHASHERINA, N., red.; KOVALEV, A., tekhn.red.

[School radio station is calling] Govorit shkol'nyi radiouzel. Izd-vo TsK VLKSM "Molodaia gvardiia," 1958. 116 p. (MIRA 12:2)
(Radio, Shortwave)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

POKROVSKAYA, Antonina Iosifovna; SHASHERINA, N., red.; KIRILLINA, L., tekhn. red.

[Teach your friends tasty cooking] Nauchi tovarishchei vkusno gotovit'. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1961. 92 p. (MIRA 14:8)

(Cookery)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

YERAKHTIN, D. D., Docent; SHASHEV, I. A., Eng.

Lumber - Standards

Temporary garages and simplified kilns for gas-generating blocks. Les. prom. 12 no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 Uncl.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIKASHVILI, N. R., Doc Med Sci, "History of Health [illegible] Georgian SSR." Tbilisi, 1961. (Tbilisi State Med Inst). (KL, 3-61, 229).

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIKASHVILI, Nevrestan Redzhebovna

[The pride of Soviet public health; organization and development of maternal and infant welfare in Georgia] [Gordost' sovetskogo zdravookhraneniia; organizatsiia i razvitie okhrany materinstva i mladenchestva v Gruzii. Tbilisi, Gos.izd-vo "Sabchota Sakartvelo,"] 1962. 205 p. [In Georgian]
(MIRA 17:5)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIKHINA, M.N.

Model of Shigella keratoconjunctivitis and its value in the bacteriological diagnosis of dysentery. Zdrav. Turk. 5 no.6:8-12 N-D '61. (MIRA 15:2)

1. Iz kafedry mikrobiologii (zav. - prof. Ye. Ya. Gleyberman) Turkmenskogo gosudarstvennogo meditsinskogo instituta.
(CONJUNCTIVITIS) (DYSENTERY)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIKHINA, M.N.

Changes of micro- and macroorganisms in shigella keratoconjunctivitis. Izv. AN Turk. SSR. Ser. biol. nauk no.1:54-62 '62.
(MIRA 15:3)

1. Ashkhabadskiy institut epidemiologii i gigiyeny i Turkmenskoy meditsinskiy institut.
(KERATOCONJUNCTIVITIS)
(SHIGELLA)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

r 41825-65

ACCESSION NR: AP5009033 S/0296/64/000/006/0050/0056

AUTHOR: Stepanyan, Ye. G.; Semashko, L. L.; Geyberman, S. Ye.; Yurko, L. P.; Shashikhina, M. N.

TITLE: Experimental Breslau salmonellosis in sparrows

SOURCE: AN TurkmSSR. Izvestiya. Seriya biologicheskikh nauk, no. 6, 1964, 50-56

TOPIC TAGS: salmonella, food poisoning, infection, epidemiology

ABSTRACT: Oral infection of young sparrows with either a typical or a non-gas producing Breslau culture (*S. typhi murium*) results in a disease with a definite clinical course and pathological changes in various organs accompanied by prolonged elimination of the causative agent. The clinical and pathohistological data indicate that infection with the non-gas producing variant results in a more severe form of the disease. Bacteriological investigations during the infectious process revealed that a typical Breslau culture breaks down into gas- and non-gas producing variants. However, the etiologic agents of mouse typhoid which do not produce gas in media with carbohydrates showed that this characteristic is persistent. The fact that sparrows can become infected by *S. typhi murium*, the prolonged elimination of

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L 41825-65
ACCESSION NR: AP5009033

the bacteria, and the comparative ease with which healthy birds contract the disease on contact with sick birds point up the epidemiological significance of this reservoir of salmonellosis. Orig. art. has: 2 figures, 1 table.

ASSOCIATION: Ashkhabadskiy institut epidemiologii i gigiyeny Minzdrava Turkmenskoy SSR (Ashkhadbad Institute of Epidemiology and Hygiene, Turkmen Ministry of Health)

SUBMITTED: 23Nov63 ENCL: 00 SUB CODE: LS

NO REF SOV: 006 OTHER: 004

Card 2/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

ALEKHIN, Yuriy Mikhaylovich; VOSKRESENSKIY, K.P., otvetstvennyy redaktor; SHASHILINA, M.K., redaktor; SOLOVEYCHIK, A.A., tekhnicheskiy redaktor

[Short-range forecasts of stream-flow of lowland rivers] Kratkosrochnye prognozy stoka na ravninnykh rekakh. Leningrad, Gidrometeorologicheskoe izd-vo, 1956. 265 p. (MLRA 10:1)
(Rivers)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHILOV, V.

27-6-25/29

AUTHOR: Shashilov, V.

TITLE: An Interesting Encounter (Interesnaya vstrecha)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1957, Nr. 6(145), p 32, (USSR)

ABSTRACT: The short notice deals with a meeting between the students of the agricultural mechanization school Nr. 14 of the Chelyabinsk oblast' and Piotr Afanasyevich Troynin, Hero of the Soviet Union and Hero of Socialist Labor, who told of his work in a Sovkhoz and in a technical school for mechanization and electrification of agriculture. There is one photo.

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

ZARUBIN, Vasiliy Andreyevich; MOGILYANSKIY, N.K., doktor tekhn. nauk, retsenzent; SHASHILOVA, V.P., inzh., retsenzent; KOVALEVSKAYA, A.I., red.; SOKOLOVA, I.A., tekhn. red.

[Making of fruit and berry wines]Proizvodstvo plodovo-iagodnykh vin. Moskva, Pishchepromizdat, 1962. 105 p. (MIRA 15:11)

(Fruit wines)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

DENSHCHIKOV, M.T.; SHASHILOVA, V.P.

Continuous method of fruit and berry juice fermentation in a cascade-deck system. Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin. prom. no.11:53-59 '63. (MIRA 17:9)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

MAYOROV, V.S.; SHASHILOVA, V.P.; MATASOVA, N.N.

Use of the natural food coloring matter from grape pulp in the production of fruit and berry wine. Trudy TSentr.nauch.-issl. inst.piv., bezalk. i vin. prom.no.11:61-66 '63. (MIRA 17:9)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

DENSHCHIKOV, M.T.; SHASHILOVA, V.P.

Fermentation of glucose-protein concentrate solutions on cascade-tray units. Ferm. i spirt. prom. 30 no.3:21-23 '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivo-bezalkogol'noy i vinnoy promyshlennosti.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, A. I.

SHASHIN, A. I. "On a Fixed Time for Apple Scab Control," Sad i Ogorod, no. 3, 1950, pp. 21-23. 80 Sel3

SOURCE: SIRA SI 90-53, 15 Dec. 1953

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, A.

Cotton Growing

Evaluation of the treatment of cotton seeds with "granosan" for mass methods Khlopkovodstvo No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, A.

Cotton Growing

Effect of thickness of stand on the degree to which the cotton stalk wilts. Khlopkovodstvo no. 6, 1952.

Monthly List Of Russian Accessions. Library of Congress. November, 1952. Unclassified.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, A. I. and FEDORENKO, V. A.

Spravochnik po mashinostroitel'nomu chercheniu. 2 izd. Moskva, Mashgiz, 1949. 143 p. diagrs.

DLC: TJ230.F38 1949

(Handbook of mechanical drawing.)

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, A.Ya.

BELOTSERKOVSKIY, A.M.; VOLKOV, Yu.N.; SHASHIN, A.Ya.; PONAMAREV, I.P., redaktor; ASTAKHOV, A.V., redaktor; [illegible]OVA, Ye.I, tekhnicheskiy redaktor

[Mechanical equipment for inclined skip hoists; calculation and design] Mekhanicheskoe oborudovanie naklonnogo skipovogo pod"ema; raschet i konstruirovanie. Moskva, Ugletekhizdat, 1954. 103 p. (MLRA 8:4)
(Mine hoisting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, I.; PAVLOV, K.; IVANOV, A.

"Our Experiences in Presowing Preparation of Soil for Winter Wheat Under the Conditions in Sofiyska Okoliya." p. 8, (KOOPERATIVNO ZEMEDELIE, Vol. 9, No. 10, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4 No. 5, May 1955, Uncl.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M.

Pregnancy and labor in Itsenko-Cushing syndrome. Probl.endok. i gorm. 3 no.4:117-118 Jl-Ag '57. (MIRA 10:12)

1. Iz otdeleniya fiziologii i patologii beremennosti (zav. - prof. S.M.Bekker) Instituta akusherstva i ginekologii AMN SSSR (dir. - cheln -korresponsent AMN SSSR prof. P.A.Beloshapko)

(CUSHING SYNDROME, in pregnancy, normal delivery (Rus))
(PREGNANCY, in various diseases, Cushing synd., normal delivery (Rus))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M.

SHASHIN, M.M., aspirant

Theca-cell tumors of the ovaries [with summary in English]. Akush. i gin. 33 no.4:93-97 Jl-Ag '57. (MIRA 10:11)

1. Iz Instituta akusherstva i ginekologii (dir. - prof. B.A.Beloshapko, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. K.M.Figurnov) AMN SSSR.

(OVARIES, neoplasms
theca cell tumor)
(THECA CELL TUMORS
ovaries, clin. aspects & pathol.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M. (Leningrad, pr.Obukhovskoy oborony, d.19, kv.4)

Clinical analysis of 28 theca-cell tumors of the ovary. Vop. onk. 4 no.2:187-189 '58. (MIRA 12:8)

1. Iz Instituta akusherstva i ginekologii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof.P.A.Beloshapko, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof.K.M.Figuronov).
(THECA CELL TUMORS, statist.
clin. statist. (Rus))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M. (Leningrad)

Precocious physical and sexual development in a 9-year-old girl. Probl.endok. i gorm. 5 no.4:113-114 Jl-Ag '59. (MIRA 13:2)

1. Iz Instituta akusherstva i ginekologii (direktor - chlen-korrespondent AMN SSSR prof. P.A. Beloshapko, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. V.G. Baranov).
(PUBERTY, PRECOCIOUS case reports)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M.

True placenta accreta at the site of a former uterine injury. Akush. i gin. 35 no.2:93-94 Mr-Ap '59. (MIRA 12:5)

1. Iz Instituta akusherstva i ginekologii (dir. - prof. P.A.Beloshapko) AMN SSSR.

(PLACENTA
accreta at site of former uterine inj. (Rus))
(UTERUS, wds. & inj.
placenta accreta at site of inj. in subsequent pregn. (Rus))

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M., kand.med.nauk; SINYUKOVA, A.I., nauchnyy sotrudnik

Case of lighthing injury of a pregnant woman and fetus. Akush. i gin. no.4:122 '61. (MIRA 15:5)

1. Iz akushersko-ginekologicheskogo otdela (zav. - kand.med.nauk M.M. Shashin) Zakarpatksogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (dir. - kand.med.nauk Ya.V. Stovbunenko-Zaychenko).

(FETUS) (PREGNANCY, COMPLICATIONS OF)
(LIGHTNING--PHYSIOLOGICAL EFFECT)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.M., kand.med.nauk

Course and outcome of pregnancy and labor in Itsenko-Cushing syndrome. Akush.i gin. no.5:78-81 '61. (MIRA 15:1)

1. Iz otdeleniya fiziologii i patologii beremennosti (zav. - prof. S.M. Bekker) Instituta akusherstva i ginekologii (dir. - chlen-korrespondent AMN SSSR prof. P.A. Beloshapko [deceased]) AMN SSSR.

(PREGNANCY, COMPLICATIONS OF) (CUSHING SYNDROME)
(LABOR, COMPLICATED)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.N.

AID P - 1525

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 21/36

Authors : Medvedev, A. G., Eng., Okerblom, Yu. I., Eng. and Shashin, M. N., Eng.

Title : Improvement of a surface condenser at the Podol'sk Plant im. Ordzhonikidze

Periodical : Elek. sta., 3, 49-50, Mr 1955

Abstract : An old-type condenser was remodeled and improved to increase the efficiency of a high-pressure steam turbine. The authors describe the remodeling procedure. Four drawings

Institution: None

Submitted : No date

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.N.

AID P - 3507

Subject : USSR/Power Eng

Card 1/1 Pub. 26 - 1/30

Author : Dobrynin, O. N. and M. N. Shashin, Engs.

Title : The PK-14 boiler unit

Periodical : Elek. sta., 9, 1-5, S 1955

Abstract : The design of a boiler consuming coal with high ash content is given. This 230 t/hr, 100 atm and 510°C boiler has an economizer, superheater and muffle burners of a new design. Detailed data are given in a table. Four diagrams.

Institution : None

Submitted : No date

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M. Ya.

USSR/Metals - Testing Dec 50

"Fatigue Test of Metals Under Overloading and Underloading," M. Ya. Shashin

"Zavod Lab" No 12, pp 1455-1466

Attempts to systematize sometimes-contradictory data of various investigators. None of works reviewed offered efficient method for testing metals under overloading. Bakharev method is cited as most convenient, but possibilites are not sufficiently developed. Offers several suggestions for further study of behavior of metals. Bibliography lists 49 titles, half by Soviet authors.

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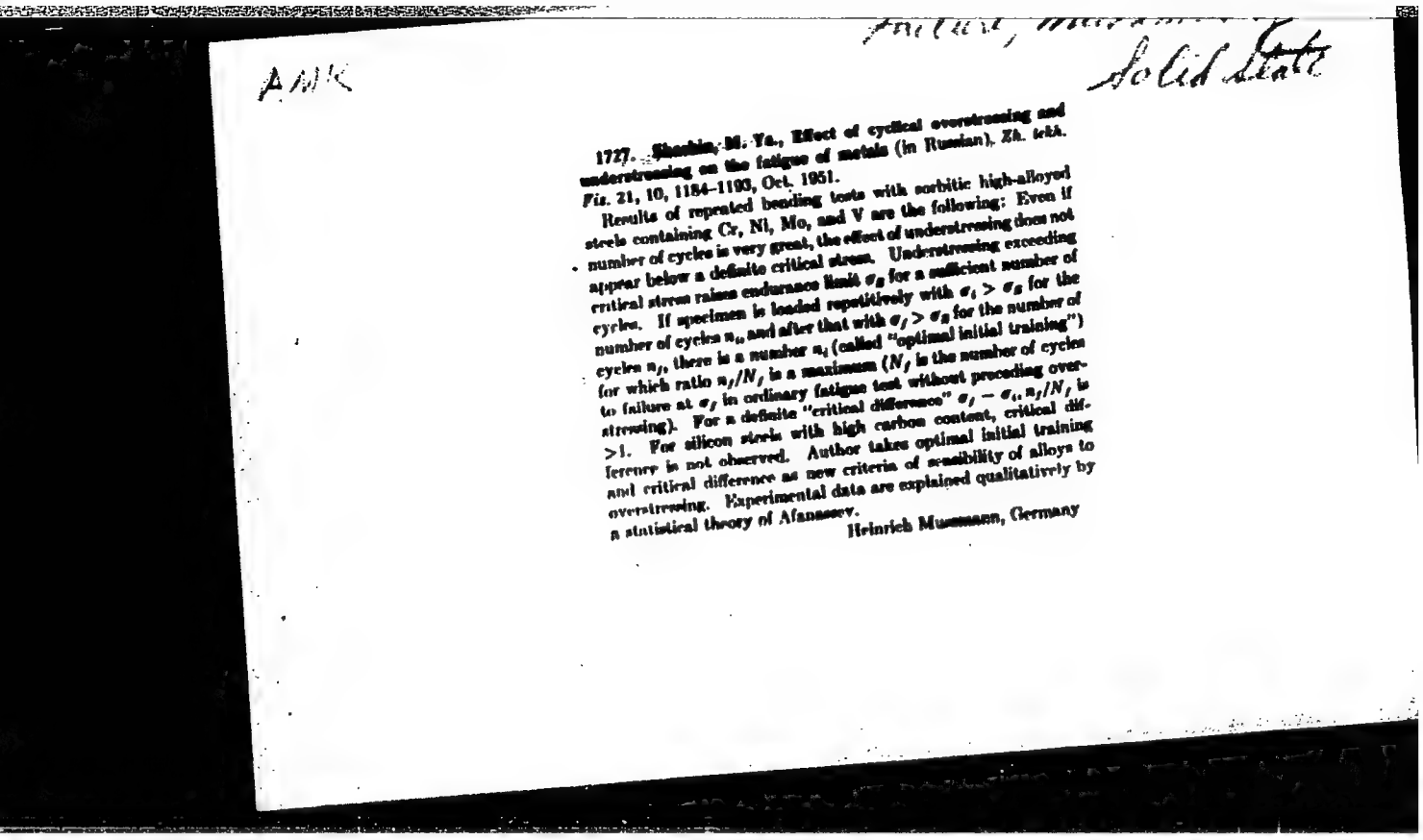

AMK

Solid State

1727. Shanbin, M. Ya., Effect of cyclical overstressing and understressing on the fatigue of metals (in Russian), *Zh. tekh. Fiz.* 21, 10, 1184–1193, Oct. 1951.

Results of repeated bending tests with sorbitic high-alloyed steels containing Cr, Ni, Mo, and V are the following: Even if number of cycles is very great, the effect of understressing does not appear below a definite critical stress. Understressing exceeding critical stress raises endurance limit σ_s for a sufficient number of cycles. If specimen is loaded repetitively with $\sigma_1 > \sigma_s$ for the number of cycles n_1, and after that with $\sigma_2 > \sigma_s$ for the number of cycles n_2, there is a number n_1 (called "optimal initial training") for which ratio n_2/N_2 is a maximum (N_2 is the number of cycles to failure at σ_2 in ordinary fatigue test without preceding overstressing). For a definite "critical difference" $\sigma_1 - \sigma_2$, n_2/N_2 is >1. For silicon steels with high carbon content, critical difference is not observed. Author takes optimal initial training and critical difference as new criteria of sensibility of alloys to overstressing. Experimental data are explained qualitativrly by a statistical theory of Afanasev.

Heinrich Mussmann, Germany

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M. YA.

Shot peening

Determining an efficient system of hardening parts by shot peening. Vest. mash. 31, No. 10, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September, 1952 1953. Unclassifie

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN M. Ya.

Study of Fatigue Strength of Shot-Peened Specimens under Stresses Exceeding the Fatigue Limit. M. Ya. Shashin

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.Ya., kandidat tekhnicheskikh nauk; PETROVA, N.A., inzhener; VOLYNKIN, V.V.

Comparison criteria for hardening by shot peening processes. Vest. mash. 35 no.10:37-41 O '55. (MLRA 9:1)
(Shot peening)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/124-57-3-3740

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 156 (USSR)

AUTHORS: Shashin, M. Ya., Kononov, Yu. I.

TITLE: On the Problem of the Shape of a Fatigue Curve (K voprosu o forme krivoy ustalosti)

PERIODICAL: V sb.: Raschet i konstruirovaniye detaley mashin. Moscow, Mashgiz, 1956, pp 3-11

ABSTRACT: The paper adduces the results of fatigue tests for the determination of the exponent m in the fatigue-curve equation

$$\sigma^m N = \text{const}$$

in relation to the type of steel, stress concentration, and hardening of the surface by blasting shot. The source data are analyzed by means of statistical small-sample analysis. It follows from the experimental data that for smoothly-ground cantilever test specimens the probable mean value of the exponent m during rotating bending is determined by the formula

$$m = 17\ \sigma_{-1}/\sigma_b .$$

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/124-57-3-3740

On the Problem of the Shape of a Fatigue Curve

Hardening by shot-blasting enhances m (in one instance, for example, raising it from 7 to 17), whereas a stress concentration impairs m; in the latter case, the smaller the radius of the notch, the smaller the exponent m.

V. P. Kogayev

Card 2/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/124-58-10 11805

Translation from: Referativnyy zhurnal, Mekhanika, 1958 Nr 10, p 149 (USSR)

AUTHORS: Petrova, N. A., Shashin, M. Ya.

TITLE: Initial Data for Computation of Torsion Bars (Iskhodnyye dannyye dlya rascheta torsionnykh valov)

PERIODICAL: V sb.: Vopr. proyektir., izgotovleniya i sluzhby pruzhin Moscow—Leningrad, Mashgiz, 1956, pp 113-121

ABSTRACT: The advantages of employing torsion bars in spring-suspension systems are listed and drawbacks in existing methods of computing their strength on the basis of results of static tensile tests are described. Taking into account the alternating-stress conditions of operation of components with a limited life, and short overload periods to which they are exposed, the author proposes a method permitting one to compute the deflection and torsion of torsion bars made of high-strength alloyed steel. Experimental data are utilized to demonstrate that the slope of the line representing the stress versus limited endurance is a function of the diameter of the bar, as well as of the ratio of the fatigue strength to the static strength of a steel.

V. A. Bykov

Card 1/1

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WASHINGTON, D.C.

Distr: 4Bcc

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

AUTHORS: Petrova, N.A., Shashin, M.Ya., Latsh, V.V. 32-11-40/60

TITLE: The Application of the Method of X-Ray Structural Analysis for the Investigation of Changes in the Upper Layers of the Metal by the Method of Scrap Slinging (Primeneniye metoda rentgenostrukturnogo analiza dlya issledovaniya izmeneniy v poverkhnostnykh sloyakh metalla pri drobemetnom naklepe)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1372-1374 (USSR)

ABSTRACT: This method of studying processes occurring in steel while being worked to sorbite steel by means of the scrap slinging process was investigated. The attempt was made to determine the depth and the degree of the plastic deformation occurring on this occasion. The samples were produced from chromium-molybdenum steel (0.33% C; 1.11% Gr; 0.35% Ni; 0.18% Mo), which was first hardened and then annealed to sorbite. The scrap slinging treatment was carried out in different ways by application of the device "ДУ-60", and the following expression was obtained by simplified parameters:

scrap velocity: v in $\frac{m}{sec}$ with a specific scrap energy of $M \frac{tm}{m^2}$ [4.5].

X-ray investigation of the samples was carried out in a special

Card 1/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

The Application of the Method of X-Ray Structural Analysis for the Investigation of Changes in the Upper Layers of the Metal by the Method of Scrap Slinging

camera with neutral intensity standard. The camera was arranged in such a manner that on one film the required interference line -Fe and the standard line were recorded. For the purpose of controlling the work performed, pictures of the sample in its original state were inserted after every 7-8 X-ray pictures. X-ray photographs were photometrized on the microphotometer "M ϕ -2". X-ray pictures were taken of the surface of the samples as well as of various parts located at different depths from the surface. Decrease of the layer of metal was brought about by etching in a 50% H_2SO_4 solution at an amperage of 0.25-0.30 A/cm^2, which was micrometrically recorded. In the course of work the values:

$M = 60\text{-}100 \frac{tm}{m^2}$ and accordingly the value $\frac{I}{I_{standard}} = 1.6 - 1.4$ was computed. At the same time it was found that the curve of the ratio $\frac{I''^2}{I_{standard}}$, which is connected with an increase of the intensity of the

manner of working which, in turn, is accompanied by an increase of deformation, leads to a critical moment for the parameter value

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

The Application of the Method of X-Ray Structural Analysis for the Investigation of Changes in the Upper Layers of the Metal by the Method of Scrap Slinging

M at 60-100 $\frac{tm}{m^2}$, and that the deformation (of third degree) towards the inside of the sample decreases rapidly, so that at ~ 0.15-0.19 mm the value $\frac{I^{112}}{I_{standard}}$ hardly differs at all from the original value. On the strength of the results obtained it was found that the value $\frac{I^{112}}{I_{standard}} = 1.6 \div 1.4$ on the surface of the sample and, accordingly, $M = 60 \div 100 \frac{tm}{m^2}$ are to be considered as criteria for the optimum manner of processing in the scrap-slinging process applied to chromium molybdenum steel (with R = 28 ÷ 32 of the initial thermal treatment). The application of the harder working methods may cause micro-cracks and other damage to the material, and may also diminish the limit of metal fatigue. There are 4 figures and 5 Slavic references.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

Shashin, M. Ya.

AUTHOR: Shashin, M.Ya., and Petrova, N.A., Candidates of Technical Sciences. 122-2-3/23

TITLE: The endurance strength of torsion bars under reversing loads (Tsiklicheskaya prochnost' torsionnykh valov)

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal) 1957, No.2, pp. 19 - 24 (U.S.S.R.)

ABSTRACT: Torsion bars are regarded as over-stressed components with a limited life. Hence, the fatigue strength for a given number of stress cycles (two millions chosen here) and the slope of the stress curve versus number of reversals in logarithmic co-ordinates are the criteria of merit. The effects of material specification, size, and shot peening procedure were examined. Silicon steels of either 0.6% carbon and 1.7% silicon or 0.7% carbon and 2.6% silicon were tested as well as an alloy steel of 0.46% C, 1% Cr, 1.5% Ni, 0.17% Mo, 0.22% Si, 0.65% Mn, 0.1% V or Ti. All were oil-quenched and tempered when made into torsion bar springs of between 20 and 48 mm diameter. The effect of shot peening depends on the specific shot energy, defined as the total kinetic energy of the shot received per unit of surface. The dependence is exponentially asymptotic to a maximum value reached in practice at a specific energy of 40 ton metres per square metre. Shot peening also increases

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The endurance strength of torsion bars under reversing loads (Cont.)

the logarithmic slope (exponent) from about 5 to about 9. The size effect is appreciable without shot peening. After shot peening to the maximum attainable fatigue strength (in 50 mm diameter samples about 50% above that of the untreated springs) the size effect disappears. Chemical composition has no effect on torsion bars heat-treated to 40 to 50 Rockwell C.

There are 12 graphs, 1 table and 10 references, 9 of which are Slavic.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/32-24-8-43/43

AUTHOR: Shashin, M. Ya., Candidate of Technical Sciences, Reviewer

TITLE: S. V. Serensen, . M. E. Garf and L. A. Kozlov, Machines for Testing Fatigue; Their Calculation and Construction (Mashiny dlya ispytaniya na ustalost'; raschet i konstruirovaniye) 404 pages, 5500 copies; price: 14R, 30K; Mashgiz, 1957

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 8, pp. 1039-1040 (USSR)

ABSTRACT: The above book is reviewed. On May 28, 1958, this book was criti-sized at the united seminar of the sektsiya metallovedeniya Leningradskogo Doma uchenykh im. Gor'kogo (Section for Metallography of the Leningrad House of Scientists imeni Gor'kiy) and the Komitet prochnosti Leningradskogo otdeleniya Nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (Committee on Strength of the Leningrad Division of the Scientific-Technical Association of the Machine-Building Industry). Participating were the Member of the AS Ukrainian SSR Davidenko, Professor Glikman, the Docents Kushelev, Zakharov, Gokhberg, Bykov, the Engineers

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Machines for Testing Fatigue; Their Calculation and Construction

Reynberg, Panov, Nemm, and others as well as the authors of the book, the Candidates of Technical Sciences Kozlov and Garf, and this reviewer.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/129-59-1-10/17

AUTHOR: Shashin, M.Ya., Candidate of Technical Sciences

TITLE: Improving the Cyclic Strength During Shot Peening (Povysheniye tsiklicheskoy prochnosti pri obrabotke detaley drob'yu)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov, 1959, Nr 1, pp 42 - 47 (USSR)

ABSTRACT: Belyayev, Serensen and Kudryavtsev (Refs 1,2,7) put forward the view that the resistance to shear depends not only on the shear stresses but also on the normal stresses. This assumption was verified by Kudryavtsev only on tubular specimens under conditions of alternating bending load (he did not carry out any torsion tests). The author of this paper studied the influence of the depth of the deformed layer produced by shot peening on the following factors: increase in the cyclic strength, distribution of the residual stresses and changes in the Type II and Type III distortions in the surface layers (Refs 8-11). Furthermore, he investigated the mechanical properties of the work-hardened layer and the influence of residual compression stresses on the increase in the cyclic strength during shot peening. The experiments showed that the depth of the work-hardened layer depends on the parameters

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Improving the Cyclic Strength During Shot Peening

of the hardening regime, on the initial hardness of the materiad and, in some cases, on the size factor. The regime of the shot peening was characterised by a generalised parameter M expressing the specific energy of the shots. In Figure 1, the influence is graphed of the size factor on the cyclic strength of torsion shafts; in Figure 2, the dependence is graphed of the Type III distortions of the here explained generalised parameter M, at the surface of the shot-peened specimen and at various depths from the surface, for a chromium-molybdenum steel. The magnitude of the axial and the tangential stresses amounted to 70 - 110 kg/mm^2 and such stresses existed up to a depth of 0.30 mm, i.e. a depth commensurate with the depth of the work-hardened layer (Figure 3). In Figure 4, the dependence is graphed of the cyclic strength on the depth of the work-hardening. In the case of a high hardness of about 48 R_C the depth of the work-hardened layer is very small. However, in the case of small specimens (5.53 mm dia), even for an insignificant depth of the work-hardened layer, the optimum work hardening will not always correspond to the optimum depth of work

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hardening. The graph of the dependence of the cyclic strength on the depth of work hardening shows a maximum which corresponds to the case of displacement of the focus of fatigue failure from the surface to the zone under the surface; this is due to the fact that the residual tensile stresses in the central part of the specimen reach their limit value. Using the formulae of Serensen and Kudryavtsev, the author calculated for this case the fatigue limit of the core which, for alternating bending, equals half of the ultimate strength. The resistance of the surface layer to cyclic loads is characterised by the cyclic strength of the entire specimen; in the non-hardened state, it is considerably lower than the strength of the core. The thus calculated values are compared with experimentally determined values in Table 1, p 45 and it can be seen that the strength of the core of high-strength steels is higher than the strength of the surface. To elucidate the role of residual stresses in the case of alternating torsion of (hollow) specimens from hard steels, the experiments were carried out on three steels, the compositions of which are entered in Table 2, p 45 and the shapes and dimensions of which are given in a sketch, p 5. After shot peening, the

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Improving the Cyclic Strength During Shot Peening

layers of the metal were removed from the internal surfaces of some of the specimens by "electro-hydraulic" machining; thus, the internal diameters of some batches of these specimens were increased to 6 and 8 mm respectively, from initial values of 2 and 4 mm, respectively. The fatigue strength of the specimens as a function of the internal diameter is graphed in Figure 6. The carried out experiments have shown that the increase in strength for alternating torsion in the case of shot peening of steel of a high hardness is due to residual compression stresses. There are 6 figures, 3 tables and 11 references, 8 of which are Soviet, 2 English and 1 German.

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PHASE I BOOK EXPLOITATION SOV/3974

Ispytaniya detaley mashin na prochnost'; sbornik statey. Po materialam Komiteta prochnosti NTO Mashproma (Testing Machine Parts for Strength; Collection of Articles. Based on Data of the Committee on Strength of Materials of the Scientific and Technical Society of the Machine-Building Industry) Moscow, Mashgiz, 1960. 226 p. Errata slip inserted. 5,000 copies printed.

Reviewer: I.V. Kudryavtsev, Doctor of Technical Sciences; Ed.: S.V. Serensen; Ed. of Publishing House: L.N. Danilov; Tech. Ed.: G.Ye. Sorokina and L.P. Gordeyeva; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): A.P. Kozlov, Engineer.

PURPOSE: This collection of articles is intended for designers and for workers at plant laboratories and scientific research institutes.

COVERAGE: The articles contain data on the experience gained by industry and research institutes in the field of full-scale and model testing of machine parts for strength. A number of theoretical considerations and the related experimental practice are presented. No personalities are mentioned. Most of the articles are accompained by references.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

I-1700

S/123/61/000/009/009/027
A004/A104

AUTHOR: Shashin, M. Ya.

TITLE: On the mechanism of the increase in cyclic strength of shot-blasted parts

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 9, 1961, 83, abstract 9B612 (V sb. "Povysheniye iznosostoykosti i sroka sluzhby mashin. v.2", Kiyev, AN UkrSSR, 1960, 143 - 152)

TEXT: The author investigated the depth of the deformed layer of alloyed steel cold-worked by shot-blasting and its connection with the increase in cyclic strength, distribution of residual compression stresses and changes of the distortions of the second and third type in the surface layers. Moreover, he studied the mechanical properties of the cold-worked layer and the effects of residual compression stresses on the increase in cyclic strength. There are 12 figures and 12 references.

N. Il'ina

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

S/766/61/000/000/003/003

AUTHOR: Shashin, M. Ya.

TITLE: Stability of statistical parameters in the processing of fatigue-test data relating to steel and titanium.

SOURCE: Statisticheskiye voprosy prochnosti v mashinostroyenii. Ed. by S. V. Serensen. Moscow, Mashgiz, 1961, 61-73.

TEXT: The paper describes a method for the determination of the sloping portion of the fatigue curve of steel specimens from tests made with a small number of specimens; due consideration is given to the scatter that is unavoidable in cyclic-load testing. It is assumed that the $\log N$ - versus $\log \sigma$ line comprises a declining straight-line portion, wherein the stress values do not exceed the elastic limit. Fatigue tests were performed with various numbers of specimens made of steel with differing chemical composition (full-page table and 5 Russian-language Soviet references). The experimental data yield an equation for the sloping portion of the fatigue curve in the form $\log N = -|m_{0.5}| \log \sigma + B$ which agrees well with the theory and which characterizes the extremely close stochastic correlational relationship between service life and stress level. The statistical processing consists in finding the fundamental statistical parameters of the correlational distribution

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(log $\bar{x}$; log σ), the setting up of the correlation equation for the determination of the scatter and the slope coefficient m which serves as the regression coefficient of the given distribution. The calculated value of the measure of the scatter is used to determine a mathematical expression for a family of fatigue curves with differing probabilities of nonfailure (survival) and failure. The fundamental deviations of the correlation and regression coefficients and of the scatter are selected as the fundamental criteria of the dependability of the statistical processing of experimental data. It is shown that if more than16 tests are made, application of the above-indicated criteria affords adequate dependability in the processing of test results obtained with both steel and titanium specimens. If the number of specimens is from 10 to 16, an evaluation of the dependability is achieved by means of the Fisher small-sample criteria. However, an approximate evaluation of a statistical analysis is possible even with a smaller number of specimens, provided reference is made to supplementary dependability criteria. There are 4 figures, 8 tables, and 9 references (8 Russian-language Soviet and 1 English-language publication in Russian-language translation).

ASSOCIATION: None given.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

S/123/62/000/013/001/021
A004/A101

AUTHOR: Shashin, M. Ya.

TITLE: Stability of statistical parameters in processing the results of fatigue tests of steel and titanium specimens

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 13, 1962, 16, abstract 13A94 (In collection: "Statist. vopr. prochnosti v mashinostr.", Moscow, Mashgiz, 1961, 61 - 74)

TEXT: The author analyzes the equation of the fatigue curve $\lg N = -|m_{0.5}| \lg\sigma + B$, plotted on the basis of experimental data, and points out that it is well in agreement with the theory and characterizes the close correlation between N and σ. He presents the results of a statistical processing of bending fatigue tests with rotation of smooth specimens 7.5 mm in diameter made of Cr-Ni-Mo-steel and Ti, which consisted in finding the basic statistical parameters of correlation distribution ($\lg N$ and $\lg\sigma$), compiling the correlation equation, determining the scattering measure and index of slope m, which is the regression coefficient of the given distribution. It is shown that, if the number of tests

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Stability of statistical parameters in...

exceeds 16, the use of the correlation and regression coefficients and scattering measures as the basic criteria of reliability of fundamental deviations ensures a sufficient dependability of the processing of test results, both of steel and titanium specimens. With 10 - 16 specimens the reliability is evaluated with the aid of the Fisher criterion. If there are even less specimens, an approximated evaluation of statistical processing is also possible, if additional reliability criteria are used.

A. Usov

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

S/122/63/000/001/005/012
D263/D308

AUTHOR: Shashin, M.Ya., Candidate of Technical Sciences

TITLE: Estimation of damage accumulation in reinforced and non-reinforced natural components under cyclic twisting

PERIODICAL: Vestnik mashinostroyeniya, no. 1, 1963, 35-38

TEXT: Experimental data obtained during tests are presented on the vulnerability of torsion bars in some systems taking into account stress variations under actual working conditions. An attempt is made to apply these data to the estimation of presumptive reliability of design components allowing for the effect of reinforcement. The final results of the author's previous works, referring to torsion bars subjected to a special thermal treatment, are analyzed. The following subjects are discussed: 1) the results of natural overloading tests according to French and Kommers: a) vulnerability on the basis of the secondary fatigue curves, 2) determination of the cumulative damage magnitude: a) comparison of results

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of operation tests with design strength data, b) determination of cumulative damage in reinforced and non-reinforced torsion bars. Conclusion: this work shows that more precise methods of calculation of damage accumulation are needed. There are 1 figure and 3 tables.

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L 13120-63 EWP(k)/EWP(q)/BDS/EWP(r)/EWT(m) AFFTC Pf-4 JD/HW
S/122/63/000/004/005/006

59

AUTHOR: Shashin, M. Ya.

TITLE: Shot hardening in a stressed condition of parts working during alternating torsion

PERIODICAL: Vestnik mashinostroyeniya, no. 4, 1963, 53-56

TEXT: The contribution of previous investigations of the influence of residual stresses on strength during variable torsion is considered. This work presents additional developments concerning such stresses applicable to stressed cold working when the torsion being hardened by shot is twisted resiliently. Possibilities are tested for increasing the time of service of the torsions with treatment with shot because of the combination of plastic subjugation (that is, the plastic twisting of them in the direction in which they are deformed in an operating process). The mechanical properties (torsion, elongation, HRC) of the

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Short hardening in a stressed condition...

steels used to study the influence of stressed cold hammering on a circular surface are given. Schemes of devices for cold working of torsions and coils in a stressed condition are shown. The results of experimental tests for the life of steel samples of 5 and 10 mm diameters under various procedures of hardening and the results for tests of experimental torsions of 25 mm diameter are given. The effectiveness of hardening by various methods for 5 and 10 mm diameter samples is essentially similar. The effectiveness of hardening of coils of compression with wire diameter of more that 5 mm is 1.5-2 times greater for hardening treatment with shot in stressed condition than for the usual shot blasting treatment. The effectiveness of cold hammering with shot in a stressed condition in comparison with subjugation will be the greater, the greater the cross section of the component. Hardening of spiral coils of compression with stressed cold working with shot is reasonable in such cases when the diameter of the coil is more than 10 mm . There are 3 tables, 3 figures, and 8 non-English language references.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.Ya., doktor tekhn.nauk

Increase in breaking strength at repeated impacts due to the use of hardening treatments. Vest.mashinostr. 43 no.9:12-14 S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, Maria Yakovlevich, doktor tekhn. nauk; NAUMOVA, Ye.A., red.

[Effect of a hardened layer on increasing the durability of machine parts] Vliianie uprochnennogo sloia na povyshenie dolgovechnosti detalei mashin. Leningrad, 1964. 33 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Peredovoi nauchno-tekhnicheskii opyt. Seriia: Metallovedenie i termicheskaia obrabotka, no.2) (MIRA 17:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, M.Ya., doktor tekhn.nauk, prof.

Evalua' 'ng the dispersion of cyclic strength values. Vest. mashinostr. 45 no.2:24-28 F '65.

(MIRA 18:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, Mark Yakovlevich, doktor tekhn. nauk, prof.; NAUMOVA, Ye.A., red.

[Evaluating the scattering of the values for the structural stability of machine parts] Otsenka rasseivaniia znachenii konstruktivnoi prochnosti detalei mashin. Leningrad, 1965. 23 p. (MIRA 18:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

NOTKIN, Ye.M.; KUR, G.Ye.; ARONSHTEYN, N.M.; prinimali uchastiye: KAMNEV, V.S.; SHASHIN, N.N.; TYURIN, V.I.; VENBRIN, V.D.; MAREYEV, D.I.; VILENSKAYA, I.A.; BORODIN, B.V.; DON-YAKHIO, I.A.; MOSKALENKO, S.M.; ABRAMOVA, Z.A.; KLIMOV, M.D.; VASIL'YEV, I.A. LUK'YANOV, S.K.

Introducing automatic control in coremaking. Lit. proizv. no.6: 15-19 Je '62. (MIRA 15:6)

1. Nauchno-issledovatel'skiy institut santekhniki Akademii stroitel'stva i arkhitektury SSSR (for Luk'yanov).
(Coremaking) (Automatic control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

NOTKIN, Ye. M.; KUR, G. Ye.; ARONSHTEYN, N. M.; Prinimali uchastiye: KAMNEV, V. S.; SHASHIN, N. N.; TYURIN, V. I.; VENBRIN, V. D.; DON-YAKHIO, I. A.; ABRAMOVA, Z. A.; VASIL'YEV, I. A.; LUK'YANOV, S. K.

Automatic process for the manufacture of sand cores for radiators. Sbor. trud. NIIST no.10:5-40 '62. (MIRA 15:10)

1. Moskovskiy chugunoliteynyy zavod imeni Voykova (for Kamnev, Shashin, Tyurin, Venbrin).

(Coremaking) (Radiators)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, Petr Petrovich, inzh.-meliorator; ZHIVOTKOV, V., red.; IVANOV,N., tekhn. red.

[Improvement of meadows is an urgent task of collective and state farms] Uluchshenie lugov - neotlozhnoe delo kolkhozov i sovkhozov. Kaluga, Kaluzhskoe knizhnoe izd-vo, 1959. 17 p. (MIRA 15:1)

1. Kaluzhskoye oblastnoye upravleniye sel'skogo khozyaystva (for Shashin).

(Pastures and meadows)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

ACC NR: AR6011566 SOURCE CODE: UR/0196/66/000/001/A009/~~A009~~ A010

30 B

AUTHOR: Nikitin, V. G.; Shashin, V. I.

TITLE: Electric field at the axis of a charged disc with a concentric opening

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 1A75

REF SOURCE: Tr. po teorii polya, vyp. 1, 1964, 64-70

TOPIC TAGS: electric field, electric theory, electric conductor

ABSTRACT: The electric field is found at the axis of a charged disc with a concentric opening with consideration to the edge effect and also disregarding this effect. 4 illustrations, bibliography of 2 titles. From the summary. [Translation of abstract]

SUB CODE: 09

Card 1/1 vmb UDC: 537.212

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

L 38478-66 EWT(1)

ACC NR: AR6017227 SOURCE CODE: UR/0058/65/000/012/B011/B011

32
B

AUTHOR: Nikigin, V. G.; Shashin, V. I.

TITLE: Electric field on the axis of a charged disk with a concentric hole

SOURCE: Ref. zh. Fizika, Abs. 12B127

REF SOURCE: Tr. po teorii polya, vyp. 1, 1964, 64-70

TOPIC TAGS: electric field, disk, edge effect

ABSTRACT: The electric field is determined on the axis of a charged disk with a concentric hole with and without consideration of the edge effect. [Based on authors' abstract] [AM]

SUB CODE: 20/ SUBM DATE: none

Card 1/1 pb

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHASHIN, V.M.

Theory of flat step bearing with pressure lubrication. Izv.vys.ucheb. zav.; av.tekh. 3 no.3:99-106 '60. (MIRA 13:10)

1. Moskovskiy aviatsionnyy institut. Kafedra AD-1.
(Bearings (Machinery))

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/179-59-1-34/36

AUTHOR: Shashin, V. M. (Moscow)

TITLE: Flow of a Viscous Gas in the Space between Eccentric Cylinders (Techeniye vyazkogo gaza v zazore mezhdu ekstsentrichnymi tsilindrami)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1959, Nr 1, pp 179-182 (USSR)

ABSTRACT: The size of the space is assumed small compared with the dimensions of the cylinders; the gas is supplied at constant pressure through a series of holes, and the problem is to find the pressure distribution in the space between the cylinders. The problem is formulated in terms of a complicated set of differential equations, and using complex variable methods, an approximate formal solution is obtained. There are 2 figures and 5 references, 1 English and 4 Soviet.

ASSOCIATION: Moskovskiy aviatsionnyy institut (Moscow Aeronautical Institute)

SUBMITTED: August 8, 1958.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SOV/147-59-2-4/20

AUTHORS: Mirolyubov, I.V. and Shashin, V.M.

TITLE: Load Carrying Capacity of an Air Lubricated Bearing at Rest (Raschet podderzhivayushchey sily vozdushnogo podshipnika skol'zheniya pri otsutstvii vrashcheniya)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1959, Nr 2, pp 25-32 (USSR)

ABSTRACT: On account of their capability to withstand high loads even when at rest and because of very low coefficient of friction, air lubricated bearings are being used in recent years for the following purposes:
a) experimental rigs for measuring the torque when a very high accuracy is required (e.g.wind tunnel balances, turbine and compressor test beds etc);
b) experimental rigs where only a small torque can be employed but it is desired to achieve high revolutions and c) in instruments. The general lay-out as shown in Fig 1, is as follows: high pressure air is fed into the clearance between the journal and the bearing through a number of radial orifices thus

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L 12739-63

S/208/63/003/002/010/014

Estimates from below ....

$$f(x_1,\dots,x_s)\in H_s(\alpha), \text{ if } \max_{\substack{x_1,\dots,x_s\\ \alpha_1,\dots,\alpha_s}} \left|f^{(\alpha_1,\dots,\alpha_s)}(x_1,\dots,x_s)\right| \leq 1,\ 1\leq \alpha_i\leq \alpha \tag{0.2}$$

where $f^{(\alpha_1,\dots\alpha_s)}(x_1,\dots,x_s)$ has as its Fourier series

$$\sum_{m_1,\dots,m_s=-\infty}^{\infty} m_1^{\alpha_1}\dots m_s^{\alpha_s}(2\pi i)^{\alpha_1+\dots+\alpha_s} c(m_1,\dots,m_s)e^{2\pi i(m_1x_1+\dots+m_sx_s)} \tag{0.3}$$

It is seen from the proofs that the same methods can be used for similar estimates of convergent classes of functions specified by the rate of decrease of their Fourier coefficients. The author compares his estimates with errors estimated from above by known quadrature formulas and his estimates turns out to be quite accurate.

SUBMITTED: June 1, 1962

Card 2/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHARYGIN, L.M.; POSPELOV, A.A.; CHUKHLANTSEV, V.G.

Preparation of granular zirconyl phosphate by freezing, and its ion-exchange properties. Radiokhimiia 7 no.6:744-747 '65. (MIRA 19:1)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

PONOMAREV, I.; SHARYGIN, M.

Toward new milestones. Sov.shakht. 10 no.6:5-6 Je '61. (MIRA 14:9)

1. Predsedatel' shakhtkoma, kombinat Bashkirugol' (for Ponomarev).
2. Starshiy normirovshchik Kumertauskogo ugol'nogo razreza kombinata Bashkirugol' (for Sharygin).
(Bashkiria--Strip mining--Labor productivity)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHARYGIN, N. G. and KARIMOV, A. G.

Apparatus for determination of the Specific Gravity of Fused Salts and Fluxes. U.S.S.R. 105,699, May 25 1957.

The sp. gr. is detd. by comparing the height to which the fused salt or flux ascends in a tube and the height of water in a similar tube, both tubes being evacuated to the same extent. The melt is kept in a graphite crucible and ascends in a quartz tube provided with electrodes connected to a galvanometer for reading the level.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548630003-1

SHARYGINA, A. P.

USSR / General and Special Zoology. Insects. P

Abs Jour: Ref Zhur-Biol., No 3, 1958, 11747

Author : Sharygina A. P.
Inst : Ivanov Agricultural Institute.
Title : On the Development of the Cabbage Butterfly in Ontogenesis.

Orig Pub: Sb. nauchn. tr. Ivanovsk. s.-kh. in-ta, 1956, vyp 14, 200-205.

Abstract: No abstract.

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